DOCKET NO.: ISIS-5207 PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Brenda F. Baker, et al. Confirmation No.: 5280

Application No.: 10/700,697 Group Art Unit: 1635

Filing Date: November 4, 2003 Examiner: Tracy Ann Vivlemore

For: SUGAR SURROGATE-CONTAINING OLIGOMERIC COMPOUNDS AND

COMPOSITIONS FOR USE IN GENE MODULATION

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

\boxtimes	In accordance with § 1.97(c), this Information Disclosure Statement is being
	filed after the period set forth in § 1.97(b) above but before the mailing date of
	either a Final Action under § 1.116 or a Notice of Allowance under § 1.311, or
	before an action that otherwise closes prosecution in the application, therefore:
	Certification in Accordance with § 1.97(e) is attached; or
	The fee of $$180.00$ as set forth in $$1.17(p)$ is attached.
\boxtimes	Copies of reference numbers 31-59 listed on the attached Form PTO-1449 are
	enclosed herewith.
\boxtimes	Copies of reference numbers 1-30 on the attached Form PTO 1449 are not
	required to be submitted pursuant to 37 CFR § 1.98(a)(2)(ii).

The enclosed 1449 form includes Office Actions and cited references from related applications. For the Examiner's convenience, also enclosed herewith is a table listing related applications and Office Actions and rejections from those related applications. The enclosed 1449 form includes references from related applications that were the basis of a rejection under § 102 or § 103 and that were not previously

There are no listed references which are not in the English language.

made of record in the present application.

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050.

Date: February 19, 2008

/Jane E. Inglese/ Jane E. Inglese Registration No. 48,444

WOODCOCK WASHBURN LLP Cira Centre 2929 Arch Street, 12th Floor Philadelphia, PA 19104-2891 Telephone: (215) 568-3100 Facsimile: (215) 568-3439

PTO/SB/08A (04-07)
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Substitute for form 1449/PTO Complete if Known 10/701,236 Application Number **INFORMATION DISCLOSURE** 11-04-2003 Filing Date **STATEMENT BY APPLICANT** First Named Inventor Brenda F. Baker Art Unit 1635 (Use as many sheets as necessary) Examiner Name Tracy Ann Vivlemore Sheet ISIS-5207 of 3 Attorney Docket Number

			U.S. PATE	NT DO	NAT DOCUMENTS Name of Patentee or Applicant of									
Examiner Initials *	Cite No. ¹	Document Number Number - Kind Code ² (if known)	Publication D MM-DD-YY			Patentee or Applicant of Cited Document		olumns, Lines, Where Passages or Relevant Figures Appear						
	1	U.S. 4,720,483	01-19-198	88		Jansz et al.		r igaroo / appoar						
	2	U.S. 4,757,141	07-12-198	88		Fung et al.								
	3	U.S. 5,082,934	01-21-199	92		Saba et al.								
	4	U.S. 5,151,510	09-29-199	92		Stec et al.								
	5	U.S. 5,424,413	06-13-199	95		Hogan et al.								
	6	U.S. 5,506,212	04-09-199	96		Hoke et al.								
	7	U.S. 5,561,043	10-01-199	96		Cantor et al.								
	8	U.S. 5,631,148	05-20-199	97		Urdea								
	9	U.S. 5,639,873	06-17-199	97]	Barascut et al.								
	10	U.S. 5,719,271	02-17-199	98		Cook et al.								
	11	U.S. 5,760,202	06-02-199	98		Cook et al.								
	12	U.S. 5,861,493	01-19-199	99		Cook et al.								
	13	U.S. 5,891,684	04-06-199	99		Usman et al.								
	14	U.S. 5,955,443	09-21-199	99		Bennett et al.								
	15	U.S. 5,998,203	12-07-199	99	Matı	ılic-Adamic et al.								
	16	U.S. 6,133,246	10-17-200	00		McKay et al.								
	17	U.S. 6,210,892 B1	04-03-200	01		Bennett et al.								
	18	U.S. 6,222,025 B1	04-24-200	01		Cook et al.								
	19	U.S. 6,262,036 B1	07-17-200	01	A	rnold, Jr. et al.								
	20	U.S. 6,274,723 B1	08-14-200	01		Nilsen								
	21	U.S. 6,506,559 B1	01-14-200	03		Fire et al.								
	22	U.S. 6,818,759 B2	11-16-200	04	В	eigelman et al.								
	23	U.S. 7,022,828 B2	04-04-200	06		McSwiggen								
	24	U.S. 2003/0125241 A1	07-03-200	03	W	issenbach et al.								
	25	U.S. 2003/0139585 A1	07-24-200	03	Ţ	Jhlmann et al.								
	26	U.S. 2003/0143732 A1	07-31-200	03	F	osnaugh et al.								
	27	U.S. 2003/0206887 A1	11-06-200	03	N	Iorrissey et al.								
	28	U.S. 2004/0029275 A1	02-12-200	04		Brown et al.								
	29	U.S. 2004/0146867 A1	07-29-200	04		Slattum et al.								
	30	U.S. 2005/0142535 A1	06-30-200	05		Damha et al.								
		F	OREIGN PA	TENT	DOCU	MENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Docu Country Code ³ - Number ⁴ - Kind C		D	ication ate D-YYYY	Name of Patentee or A Cited Docume		Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T^6					
	31	EP 0 266 168 A2		05-04	1-1988	Amoco Cor	p.							
	32	WO 94/02498 A1		02-03	3-1994	Worcester Founda Experimental B	ation for iology							
	33	WO 96/07392 A2		03-14	1-1996	Hybridon, I								
	34	WO 02/44321 A2		06-06	5-2002	Max-Planck-Gese Wissenschafter								

Date Considered

Examiner Signature

PTO/SB/08B (04-07)
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Substitute t	for form 1449/PTO				Complete if Known
INITOI		DIC	CLOCUDE	Application Number	10/701,236
_	_	_	CLOSURE	Filing Date	11-04-2003
STAT	EMENT B	Y Al	PPLICANT	First Named Inventor	Brenda F. Baker
				Art Unit	1635
	(Use as many she	ets as	necessary)	Examiner Name	Tracy Ann Vivlemore
Sheet	2	of	3	Attorney Docket Number	ISIS-5207

		NON PATENT LITERATURE DOCUMENTS	_
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2
	35	ALAHARI, J. Pharmacology and Experimental Therapeutics, 1998, 286, 419-428	
	36	BEIGELMAN, J. Biol Chem, 1995, 270, 25702-25708	
	37	BERGER, Nucleic Acids Research, 1998, 26, 2473-2480	
	38	BEVILACQUA, Biochemistry, 1996, 35, 9983-9994	
	39	BOUTLA, Current Biology, 2001, 11, 1776-1780	
	40	COOK, Anti-Cancer Drug Design, 1991, 6, 585-607	
	41	DAMHA, J. Am. Chem. Soc., 120:12976-12977	
	42	ELBASHIR, <i>EMBO J.</i> , 2001, 20, 6877-6888	
	43	HAMMOND, Nature, 2001, 2, 110-119	
	44	KIMURA-HARADA, FEBS Lett., 1971, 13, 335-338;	
	45	KOIZUMI, Nucleic Acids Research, 1989, 17, 7059-7071	
	46	KUIMELIS, <i>Nucleic Acids Res.</i> 1994, 22, 1429-1436	
	47	LESNIK, Biochemistry, 1995, 34,10807-10815	
	48	PARRISH, <i>Molecular Cell</i> , 2000, 6, 1077-1087	
	49	PORTA, Biotechnology, 1995, 13, 161-164	

Examiner	Date	
Signature	Considered	

1	Substitu	te for form 14	149/P	ТО	C	omplete if Known
	INIEODA	MATION DISC	אר וי	HIDE	Application Number	10/701,236
		MENT BY AP		_	Filing Date	11-04-2003
	017(12)			First Named Inventor	Brenda F. Baker	
					Art Unit	1635
	(Use	as many she	ets a	is necessary)	Examiner Name	Tracy Ann Vivlemore
	Sheet	3	of	3	Attorney Docket Number	ISIS-5207

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	50	SHUMAN, J. Biol Chem, 1993, 268, 18943-18950	
	51	TOSQUELLAS, Nucleic Acids Research, 1998, 26, 2069-2074	
	52	TRACEWELL, Toxicology and Applied Pharmacology, 1995, 135, 179-184	
	53	TUSCHL, Molecular Interventions, 2002, 2, 158-167	
	54	VERONESE, Il Farmaco, 1999, 54, 497-516	
	55	WILDS, Nucleic Acids Res., 2000, 28, 3625-3635	
	56	WU, J. Biol. Chem, 1998, 273, 2532-2542	
	57	YU, RNA, 1997, 324-331	
	58	YU, Bioorganic and Medicinal Chemistry, 1996, 4, 1685-1692	
	59	Table listing related applications and office actions and rejections from those related applications	

Examiner		Date	\top
	1	, Date ,	
Signature		Considered	d

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

ISIS-5207 10/701,236

REJECTIONS MADE IN OTHER APPLICATIONS

Application Number	Attorney Docket Number	Date of Official Action on the	Rejections Levied in Official Action	Other Rejections Levied in Official	Application Status
		Merits	under 35 U.S.C. §§ 102 or 103	Action	
08/659,440	ISIS2197	January 13, 1997	§103 (a): Metelev,	§112, first	Issued (US
			Bioorg. Med. Chem.	paragraph,	5,898,031)
			Lett. 1994, 4:2929-	enablement	
			2934; and Lengyel		
			Journal of		
			Interferon Res.,		
			1987, 7, 511		
		July 22, 1997	§ 103(a): Strickland		
			Science 1988		
			241:680-684;		
			Metelev, Bioorg.		
			Med. Chem. Lett.		
			1994, 4:2929-2934;		
			and Dagle, Nucleic		
			Acids Res. 1991,19,		
			1805-1810		
		January 28, 1998	Strickland ,Science		
			1988 241:680-684;		
			Metelev, Bioorg.		
			Med. Chem. Lett.		
			1994, 4:2929-2934;		

	Issued (US 6,107,094)		Pending					
	Obviousness-type double patenting: 08/659,440; § 112 first paragraph, enablement	Obviousness-type double patenting: 08/659,440; § 112 first paragraph, enablement			(1) § 112, first paragraph, written description;	(2) § 112, second paragraph indefiniteness	§ 112, first	paragraph, written description
and Goodchild, Bioconjug. Chem. 1990 1:165-187	None	None	§ 102 (b) PCT patent application no. WO 94/01550	§ 102 (b) PCT patent application no. WO 94/01550	(1) § 102 (b) U.S. patent no. 5,013,830;	(2) § 102 (b) U.S. patent no. 5,256,775	(1) § 102 (b) U.S.	patent no. 5,013,830;
	March 17, 1999	October 8, 1999	May 1, 2003	December 24, 2003	May 18, 2004		February 9, 2005	
	ISIS2484		ISIS4313					
	08/870,608		09/479,783					

			patent no. 5,256,775		
		September 1, 2005	(1) § 102 (b) U.S.	(1) § 112, first	
			patent no.	paragraph, written	
			5,013,830;	description;	
			(2) § 102 (b) or §	(2) § 112, second	
			103(a) U.S. patent	paragraph	
			no. 5,256,775	indefiniteness	
		June 8, 2006	(1) § 102 (b) U.S.		
			patent no.		
			6,849,726;		
			(2) § 103 (a) U.S.		
			patent no. 6,849,726		
		February 21, 2007	§ 101, utility		
10/280,600	ISIS0002-104	March 28, 2006		(1) § 112, first	Abandoned
				paragraph, written	
				description;	
				(2) § 112, second	
				paragraph	
				indefiniteness	
10/281,349	ISIS0002-105	June 30, 2006	(1) § 103 (a) U.S.	§ 112, second	Pending
	(ISIS-5780)		patent no.	paragraph	
			6,573,072;	indefiniteness	
			(2) §103(a) U.S.		
			patent no. 6,849,726		
		March 19, 2007	§ 103 (a) U.S.	Obviousness-type	
			patent no. 6,573,072	double patenting,	
				U.S. patent no.	
				6,107,094	
10/281,312	ISIS0002-106	June 29, 2006	§ 102 (e) U.S.	§ 112, second	Pending
	(ISIS-5779)		patent no. 6,573,072	paragraph	ı

		Pending										Pending)																
1 J. L	indefiniteness								Obviousness-type	double patenting,	U.S. patent no.	§ 112, first		paragraph, written description														(1) § 112, second	paragraph
		§ 102 (b) PCT	patent application no. WO 94/01550	(1) § 103 (a) U.S.	patent no.	6,573,072;	(2) §103(a) U.S.	patent no. 6,849,726	§ 103 (a) U.S.	patent no. 6,573,072		(1) § 102 (b) PCT	·	patent application no. WO 94/01550;	(2) § 103 (a) PCT	patent application	no. WO 94/01550 in	view of Hunzinker	and Leumann,	Nucleic Acid	Analogues:	Synthesis and	Properties in	Modern Synthetic	Methods, 1995, ed.	Ernst and Leumann,	pp. 331-417		
		March 21, 2006		September 22, 2006					April 2, 2007			February 10, 2005	•															August 12, 2005	
		ISIS0002-107	(ISIS-5778)									ISIS5027																	
		10/281,297										10/078,949																	

			Abandoned
indefiniteness; (2) § 112, first paragraph, written description			(1) § 112, second paragraph indefiniteness:
	(1) § 102 (e) U.S. patent no. 6,573,072; (2) §102 (e) U.S. patent no. 6,849,726; (3) § 103 (a) U.S. patent no. 6,573,072; (4) § 103 (a) U.S. patent no. 6,849,726; (5) § 103 (a) U.S. patent no. 6,573,072; (6) § 103 (a) U.S. patent no. 6,573,072; (6) § 103 (a) U.S. patent no. 6,573,072 in view of U.S. patent no. 6,673,072 in view of U.S. patent no. 6,6037,463;	(7) \$103(a) 0.5. patent no. 6,849,726 in view of U.S. patent no. 6,037,463	(1) § 102 (b) European patent no. FD 0 339 842.
	June 23, 2006		December 13, 2005
			ISIS0002-108
			10/371,526

	Pending	Abandoned
(2) § 112, first paragraph, written description; (3) § 112, first paragraph, enablement	Obviousness-type double patenting, U.S. patent application no. 09/479,783	(1) § 112, second paragraph indefiniteness; (2) § 112, first paragraph, written description; (3) § 112, first paragraph, enablement; (4) Obviousnesstype double patenting, U.S.
(2) § 103 (a) European patent no. EP 0 339 842 in view of Milligan, J. Med. Chem, 1993, 36, 1923; PCT patent application no. WO 93/07883; and U.S. patent no. 5,898,031	(1) § 102 (a) Tracewell, Toxicology and Applied Pharmacology, 1995, 135, 179-184; (2) § 102 (b) PCT patent application no. WO 94/01550	(1) § 102 (e) U.S. patent application no. 2003/0139585; (2) § 102 (e) U.S. patent application no. 2004/0146867; (3) § 103 (a) U.S. patent application nos. 2003/0139585 and 2004/0146867 in view of U.S. patent nos.
	March 23, 2007	May 8, 2006
	CHEM0003US.P2 (ISIS-5480)	CHEM0004US.P1
	10/860,455	10/701,012

	Abandoned																							
patent application no. 10/606,510	Obviousness-type double patenting, U.S. patent	application no. 10/700,884	(1) 101, non-	statutory subject	matter;	(z) Obviousness- type double	patenting, U.S.	patent no. 5,861,493	in view of U.S.	patent no.	5,256,775, U.S.	patent no.	5,466,786,	Kuimelis, Nucleic	Acids Res. 1994, 22,	1429-1436, and	Martin, Helvetica	Chimica Acta, 1995,	78, 486-504;	(3) Obviousness-	type double	patenting, U.S.	patent no. 6,222,025	in view of U.S.
5,082,934 and 5,719,271	(1) § 102 (b) Parrish, Molecular Cell, 2000, 6, 1077-	1087; (2) § 102 (b) U.S. patent no. 5,891,684	(1) § 102 (e) U.S.	patent no.	6,222,025;	(z) § 102 (b) Kimura-Harada.	FEBS Lett., 1971,	13, 335-338;	(3) § 103 (a) U.S.	patent no. 5,861,439	or U.S. patent no.	5,760,202 in view	of U.S. patent no.	5,256,775, U.S.	patent no.	5,466,786, and U.S.	patent no.	4,720,483;	(4) § 103 (a) U.S.	patent no.	5,256,775, U.S.	patent no.	5,466,786,	Kuimelis, Nucleic
	June 24, 2005		July 12, 2006																					
	CHEM0008US.P1 (ISIS-5317)																							
	10/700,884																							

	Pending
patent no. 5,256,775, U.S. patent no. 5,466,786, Kuimelis, Nucleic Acids Res. 1994, 22, 1429-1436, and Martin, Helvetica Chimica Acta, 1995, 78, 486-504; (4) Obviousness-type double patent no. 5,760,202 in view of U.S. patent no. 5,760,202 in view of U.S. patent no. 5,266,775, U.S. patent no. 5,466,786, Kuimelis, Nucleic Acids Res. 1994, 22, 1429-1436, and Martin, Helvetica Chimica Acta, 1995, 78, 486, 504.	(1) Claim of priority denied; (2) § 112, first paragraph, enablement
Acids Res. 1994, 22, 1429-1436, and Martin, Helvetica Chimica Acta, 1995, 78, 486-504	(1) § 102 (b) U.S. patent no. 5,561,043; (2) § 102 (b) U.S. patent no. 5,424,413;
	May 25, 2006
	CHEM0012US.P1 (ISIS-5318)
	10/700,939

			(3) § 102 (b) U.S.		
			patent no.		
			6,274,723;		
			(4) § 102 (b) Porta		
			& Lizardi,		
			Biotechnology,		
			1994, 13, 161-164		
10/701,316	ISIS5301	October 13, 2006	(1) § 102 (b) U.S.	(1) Claim of priority	Pending
			patent no.	denied;	
			5,998,203;	(2) § 112, first	
			(2) § 102 (b) PCT	paragraph,	
			patent application	enablement	
			no. WO 94/01550;		
			(3) § 102 (b)		
			Elbashir, EMBO J.,		
			2001, 20, 6877-		
			6888		
		March 6, 2007		§ 112, first	
				paragraph, written	
				description	
		July 10, 2007	(1) § 103 (a)	(1) Claim of priority	
			<i>J</i> .,	denied;	
				(2) § 112, first	
				paragraph, written	
			Wilds, Nucleic	description	
			Acids Res., 2000,	ı	
			28, 3625-3635 and		
			Hammond, Nature,		
			2001, 2, 110-119;		
			(2) § 103 (a)		
			Elbashir, EMBO J.,		

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																				Obviousness-type	double patenting,									
2001, 20, 6877-	6888 in view of	Wilds, Wucleic	Acids Res., 2000,	28, 3625-3635,	Hammond, Nature,	2001, 2, 110-119,	and Veronese, II	Farmaco, 1999, 54,	497-516;	(3) § 103 (a)	Tracewell,	Toxicology and	Applied	Pharmacology,	1995, 135, 179-184	in view of Wilds,	Nucleic Acids Res.,	2000, 28, 3625-	3635	(1) § 102 (b)	Parrish, Molecular	Cell, 2000, 6, 1077-	1087;	(2) § 102 (a) U.S.	patent no. 5,998,203	(1) § 102 (b)	Parrish, Molecular	Cell, 2000, 6, 1077-	1087;	(2) § 103 (a)
																				May 31, 2005						November 29, 2005				
																				ISIS5313										
																				10/700,689										

	(1) Claim of priority denied; (2) Obviousness-type double patenting, U.S. patent application no. 10/701,316; (3) § 112, second paragraph indefiniteness	(1) Claim of priority denied; (2) Obviousness-type double patenting, U.S. patent application no. 10/701,316
Parrish, Molecular Cell, 2000, 6, 1077- 1087 in view of Elbashir, EMBO J., 2001, 20 (23), 6877- 6888, U.S. patent no. 5,955,443 and Hammond, Nature, 2001, 2, 110-119	(1) § 102 (b) Parrish, Molecular Cell, 2000, 6, 1077- 1087; (2) § 103 (a) Parrish, Molecular Cell, 2000, 6, 1077- 1087 in view of Elbashir, EMBO J., 2001, 20 (23), 6877- 6888, U.S. patent no. 5,955,443 and Hammond, Nature, 2001, 2, 110-119	(1) § 102 (b) Parrish, Molecular Cell, 2000, 6, 1077- 1087; (2) § 103 (a) Parrish, Molecular Cell, 2000, 6, 1077- 1087 in view of
	July 28, 2006	November 14, 2006

	(1) § 112, first	paragraph, written	description; (2) Obviousness-	type double	patenting, U.S.	patent application	no. 10/701,316;	(3) Obviousness-	type double	patenting, U.S.	patent no.	6,107,094;	(4) Obviousness-	type double	patenting, U.S.	patent application	no. 10/281,297;	(5) Obviousness-	type double	patenting, U.S.	patent application	no. 10/078.949:
Elbashir, <i>EMBO J.</i> , 2001, 20 (23), 6877-6888, U.S. patent no. 5,955,443 and Hammond, <i>Nature</i> , 2001, 2, 110-119; (3) § 102 (b) U.S. patent no. 5,998,203	(1) § 102 (e) U.S.	patent no.	7,022,828;	Elbashir, EMBO J.,	2001, 20, 6877-	6888 in view of	Wilds, Nucleic	Acids Res., 2000,	28, 3625-3635,	Parrish, Molecular	Cell, 2000, 6, 1077-	1087, Monia, <i>J Biol</i> .	Chem., 1993, 268,	14514-14522 and	Hammond, Nature	Reviews Genetics,	2001, 2, 110-119;	(3) § 103 (a)	Bevilacqua,	Biochemistry, 1996,	35, 9983-9994 in	view of Monia. J
	September 18, 2007																					

	Pending	
(6) Obviousness- type double patenting, U.S. patent application no. 10/860,265; (7) Obviousness- type double patenting, U.S. patent application no. 10/701,007	(1) Claim of priority denied; (2) Obviousness-type double patenting, U.S. patent application no. 10/701,316; (3) Obviousness-type double patenting, U.S. patenting, U.S. patenting, U.S. patent application no. 10/701,265	(1) Obviousness- type double patenting, U.S.
Biol. Chem., 1993, 268, 14514-14522 and U.S. patent no. 5,631,148	(1) § 102 (a) Elbashir, EMBO J., 2001, 20, 6877- 6888; (2) § 102 (b) PCT patent application no. WO 94/01550; (3) § 102 (b) Monia, J Biol. Chem., 1993, 268, 14514-14522; (4) § 102 (b) Yu, Bioorganic and Medicinal Chemistry, 1996, 4, 1685-1692; (5) § 102 (b) PCT patent application no. WO 94/02498	(1) § 102 (b) Shuman, <i>J. Biol</i> <i>Chem</i> , 1993, 268,
	10/05/06	3/7/07
	ISIS5314	
	10/701,264	

patent application no. 10/701,265; (2) Obviousness-type double patenting, U.S. patent application no. 10/701,316; (3) Obviousness-type double patenting, U.S. patent application no. 09/479,783; (4) § 112, first paragraph, enablement	(1) Obviousness-type double patenting, U.S. patent application no. 10/701,265; (2) Obviousness-type double patent application no. 10/701,316; (3) Obviousness-type double patenting, U.S. patenting, U.S. patenting, U.S. patenting, U.S. patenting, U.S. patent application no. 09/479,783;
18943-18950; (2) § 103 (a) Beigelman, J. Biol Chem, 1995, 270, 25702-25708 in view of Koizumi, Nucleic Acids Research, 1989, 17, 7059-7071	(1) § 102 (a) Bevilacqua, Biochemistry, 1996, 35, 9983-9994; (2) § 102 (a) Yu, RNA, 1997, 324- 331; (3) § 103 (a) Beigelman, J. Biol Chem, 1995, 270, 25702-25708 in view of Koizumi, Nucleic Acids Research, 1989, 17, 7059-7071 and U.S.
	7/25/07

	Pending	Pending
paragraph, indefiniteness	(1) Obviousness- type double patenting, U.S. patent application no. 10/701,007; (2) Obviousness- type double patenting, U.S. patent application no. 10/860,265; (3) § 112, first paragraph, enablement	(1) Claim of priority denied; (2) § 112, second paragraph, indefiniteness; (3) § 112, first paragraph, enablement; (4) § 112, first paragraph, written description;
5,151,510; (4) § 103 (a) Yu, <i>RNA</i> , 1997, 324-331 in view of U.S. patent no. 5,151,510	(1) § 103 (a) Elbashir, <i>EMBO J.</i> , 2001, 20, 6877-6888, U.S. patent application no. 2003/014732, and U.S. patent application no. 2003/0206887 in view of U.S. patent no. 6,262,036, U.S. patent application no. 2005/0142535, and U.S. patent no. 6,133,246	(1) § 103 (a) U.S. patent no. 6,818,759 in view of U.S. patent no. 6,506,559; (2) § 103 (a) U.S. patent no. 6,506,559 in view of Alahari, J. Pharmacology and Experimental Therapeutics, 1998, 286, 419-428 and
	March 23, 2007	September 21, 2006 (1) § 103 (a) U.S. patent no. 6,818,7 in view of U.S. patent no. 6,506,4 (2) § 103 (a) U.S. patent no. 6,506,4 in view of Alahan Pharmacology an Experimental Therapeutics, 199 286, 419-428 and
	ISIS5586	ISIS5312
	11/054,848	10/700,697

	Abandoned
	(1) Claim of priority denied; (2) § 112, first paragraph, written description; (3) § 112, first paragraph, enablement; (4) Obviousness-type double patenting, U.S. patent application
599-608 in view of Berger, Nucleic Acids Research, 1998, 26, 2473-2480; (3) § 103 (a) Lesnik, Biochemistry, 1995, 34,10807-10815 in view of Berger, Nucleic Acids Research, 1998, 26, 2473-2480; (4) § 103 (a) Wu, J. Biol. Chem, 1998, 273, 2352-2542 in view of Cook, Anti-Cancer Drug Design, 1991, 6, 585-607	(1) § 102 (e) U.S. patent application no. 2004/0029275; (2) § 103 (a) U.S. patent application no. 2004/0029275 in view of U.S. patent no. 5,459,255; (3) § 103 (a) PCT patent application no. WO 94/01550 in
	October 2, 2006
	ISIS5203
	10/700,920

	Abandoned
no. 10/561,618	(1) § 112, second paragraph, indefiniteness; (2) § 101 statutory-type double patent application no. 10/700,688; (3) Obviousness-type double patent application no. 10/700,697; (4) Obviousness-type double patenting, U.S. patent application no. 10/700,930; (5) Obviousness-type double patenting, U.S. pate
view of U.S. patent no. 5,459,255	(1) § 102 (b) PCT patent application no. WO 94/01550; (2) § 102 (e) U.S. patent application no. 2003/0143732; (3) § 102 (b) U.S. patent no. 6,210,892; (4) § 102 (b) PCT patent application no. WO 02/44321; (5) U.S. patent application no. 2003/0143732 in view of U.S. patent no. 6,210,892
	February 15, 2006
	(ISIS-5200)
	10/460,433

	Abandoned	Pending
type double patenting, U.S. patent application no. 10/701,236; (8) Obviousnesstype double patenting, U.S. patent application no. 10/701,265	(1) § 112, second paragraph, indefiniteness; (2) § 112, first paragraph, written description; (3) § 112, first paragraph, enablement;	(1) § 112, first paragraph, written description; (2) § 101, utility and § 112, first paragraph,
	(1) §102 (e) U.S. patent application no. 2003/0139585; (2) §102 (e) U.S. patent application no. 2004/0146867; (3) §103 (a) U.S. patent application no. 2003/0139585 and U.S. patent application no. 2004/0146867 in view of U.S. patent no. 5,082,934 and U.S. patent no.	
	April 3, 2006	March 16, 2007
	CHEM0004US	CHEM0006US (ISIS-5240)
	10/606,510	10/701,285

		Pending		
enablement	(1) § 112, first paragraph, written description; (2) § 101, utility and § 112, first paragraph, enablement			(1) § 112, first paragraph, enablement; (2) Obviousness-type double patenting, U.S. patent application
		§ 103 (a) Elbashir, EMBO J., 2001, 20, 6877-6888, U.S. patent application no. 2003/0143732, and U.S. patent application no. 2003/0206887	§ 103 (a) Elbashir, <i>EMBO J.</i> , 2001, 20, 6877-6888, U.S. patent application no. 2003/0143732, and U.S. patent application no. 2003/0206887	§ 103 (a) Elbashir, <i>EMBO J.</i> , 2001, 20, 6877-6888, U.S. patent application no. 2003/0143732, U.S. patent application no.
	August 30, 2007	May 5, 2006	October 19, 2006	March 26, 2007
		ISIS5325		
		10/701,007		

		Pending
no. 10/860,265; (3) Obviousness-type double patenting, U.S. patent application no. 11/054,848	(1) Obviousness-type double patenting, U.S. patent application no. 10/860,265; (2) Obviousness-type double patenting, U.S. patenting, U.S. patent application no. 11/054,848	(1) § 112, first paragraph, enablement; (2) Obviousness-type double patenting, U.S. patent application no. 10/701,007; (3) Obviousness-type double
2003/0206887, U.S. patent no. 6,262,036, U.S. patent application no. 2005/0142535, and U.S. patent no. 6,133,246	§ 103 (a) Elbashir, EMBO J., 2001, 20, 6877-6888, U.S. patent application no. 2003/0143732, U.S. patent application no. 2003/0206887, U.S. patent no. 6,262,036, U.S. patent application no. 2005/0142535, and U.S. patent no. 6,133,246	§ 103 (a) Elbashir, <i>EMBO J.</i> , 2001, 20, 6877-6888, U.S. patent application no. 2003/0143732, U.S. patent application no. 2003/0206887, U.S. patent no. 6,262,036, U.S.
	September 14, 2007	April 10, 2007
		ISIS5482
		10/860,265

	Abandoned
patenting, U.S. patent application no. 11/054,848	
patent application no. 2005/0142535, and U.S. patent no. 6,133,246	(1) § 102 (b) U.S. patent no. 4,757,141; (2) § 102 (b) European patent no. EP 0 266 168; (3) § 103 (a) PCT patent application no. WO 96/07392 in view of Tosquellas, Nucleic Acids Reasearch, 1998, 26, 2069-2074; (4) § 103 (a) Boutla, Current Biology, 2001, 11, 1776-1780 in view of PCT patent application no. WO 96/07392; (5) § 103 (a) Boutla, Current Biology, 2001, 11, 1776-1780 in view of PCT patent application no. WO 96/07392 in view of Patrish,
	September 23, 2005
	CHEM0001US
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Molecular Cell, 2000, 6, 1077-1087	(1) § 103 (a) PCT	patent application no. WO 96/07392 in	view of Tosquellas,	Nucleic Acids	Reasearch, 1998,	26, 2069-2074;	(2) § 103 (a) Boutla,	Current Biology,	2001, 11, 1776-	1780 in view of	Tosquellas, Nucleic	Acids Reasearch,	1998, 26, 2069-	2074;	(3) § 103 (a) Boutla,	Current Biology,	2001, 11, 1776-	1780 and	Tosquellas, Nucleic	Acids Reasearch,	1998, 26, 2069-	2074 in view of	Parrish, Molecular	Cell, 2000, 6, 1077-	1087
	August 8, 2006																								